REMARKS

This amendment is responsive to the Office Action dated January 24, 2006. Applicant has amended claims 1, 12, 18,19, 22, and 23, and canceled claims 3 and 17, and added new claims 26–35. Claims 1, 2, 4–16, and 18–35 are pending.

Claim Rejection Under 35 U.S.C. § 102

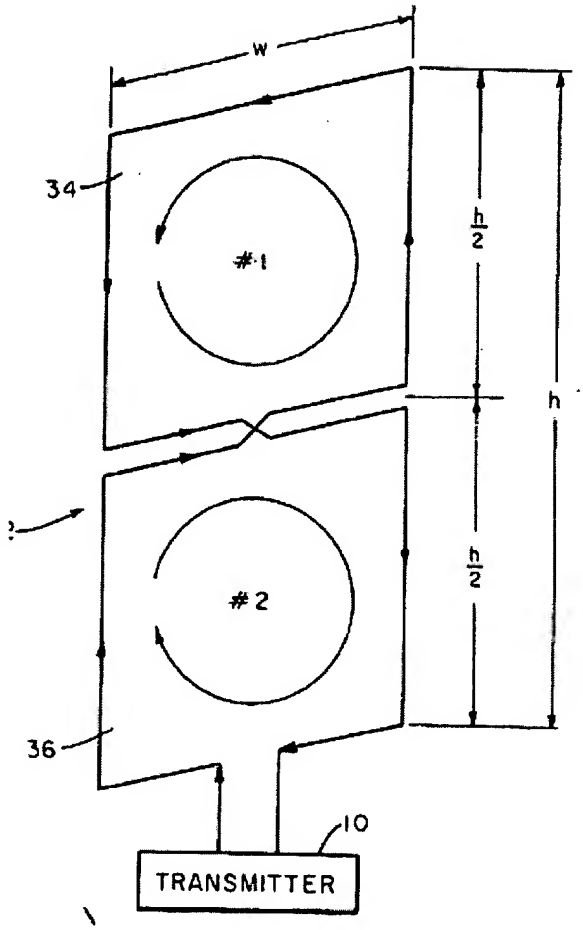
In the Office Action, the Examiner rejected claims 1–3, 8, 12–14, 16, 17, 21 and 25 under 35 U.S.C. 102(b) as being anticipated by Lichtblau (US 4,243,980). The Examiner also rejected claims 1–3, 6, 7, 12–17, 20, 21 and 25 under 35 U.S.C. 102(b) as being anticipated by Watkins et al. (US 5,103,234). Applicant respectfully traverses the rejections to the extent such rejections may be considered applicable to the claims as amended. The references fail to disclose each and every feature of the claimed invention, as required by 35 U.S.C. 102(b), and provide no teaching that would have suggested the desirability of modification to include such features.

Lichtblau

Applicant has amended claims 1 and 12 to include certain elements previously recited by dependent claims 3 and 17. Lichtblau fails to teach or suggest an antenna for interrogating RFID tags, wherein conductive loops of the antenna are spaced apart at least a distance D greater than or equal to a dimension M of the RFID tags, as recited by amended claims 1 and 12.

In contrast, Lichtblau discloses a pair of multiple loop antennas having twisted loops (34, 36) lying in a common plane. For example, FIG. 3 of Lichtblau, reproduced below, shows the antenna as having a total height h, with the loops having a height h/2.[1]

[1] See Lichtblau, col. 5, ll. 38–53; FIG. 5.



To be clear, the values *h/2* shown in FIG. 3 refer to the height of each loop in the Lichtblau system, and do not referring to the spacing between the loops, i.e., the distance between loop #1 and loop #2. Moreover, the values of *h/2* for each loop, in view of a total height of *h*, suggest that any actual distance between the loops in the Lichtblau system is negligible.

Further, Lichtblau fails to disclose any relationship between a distance that the loops of an antenna are spaced apart and a *dimension* of an RFID tag interrogated by the antenna. To the extent Lichtblau refers to distances between loops, Lichtblau refers to loops of *different antennas*, as shown in FIG. 4 (reproduced below) and discussed at col. 5, ll. 27–29. Applicant's claims refer to the spacing of loops for within the same antenna.

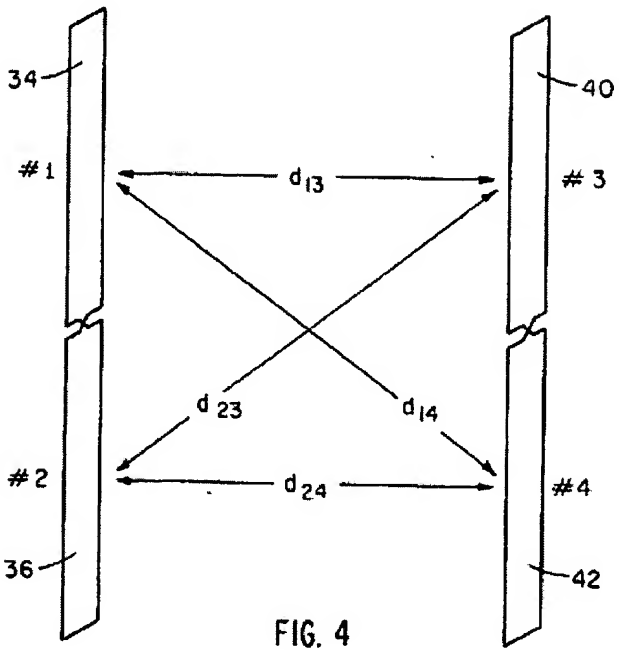


FIG. 4

For at least these reasons, Lichtblau fails to disclose that the loops are spaced apart a distance D greater than a dimension of an RFID tag to be interrogated, as required by Applicant's amended claims 1 and 12.

Watkins et al.

Watkins et al. similarly fails to teach or suggest an antenna for interrogating RFID tags, wherein conductive loops of the antenna are spaced apart at least a distance D greater than a dimension M of the RFID tags, as recited by amended claims 1 and 12. For example, Watkins et al. discloses an antenna array comprising first and second upper loops 91 and 92 in nested relationship, such that the **center** C_2 of loop 92 is offset from the center C_1 of loop 91.[2] However, the distance between the centers of the loops bears no correlation to the distance between the loops. For example, Applicant refers the Examiner to FIG. 3 of the present application that illustrates an embodiment in which an antenna has two loops with essentially concurrent centers (i.e., no spacing between the centers of the loop), but the conductive loops are spaced a distance D apart. In Watkins et al., even though the centers of the conductive loops are

[2] See Watkins et al., col. 19, ll. 12–23.

offset, the conductive loops themselves are not spaced at least a distance D greater than or equal to a dimension M of the RFID tags.

Further, Watkins et al. make no mention of the offset between the centers of the loops being a distance D greater than a *dimension* M of an RFID tag. Watkins fails to discuss any relationship between the spacing of the loops of the antenna and the dimension of the tag. Watkins et al. thus fails to teach or suggest an antenna in which the loops are spaced apart a distance $D \geq M$, as required by Applicant's amended claims 1 and 12.

In order to support an anticipation rejection under 35 U.S.C. 102(b), it is well established that a prior art reference must disclose each and every element of a claim. This well known rule of law is commonly referred to as the "all-elements rule."[3] If a prior art reference fails to disclose any element of a claim, then rejection under 35 U.S.C. 102(b) is improper. [4]

Dependent claims 6–8, 11–15, 20, 21, and 25 are allowable for at least the reasons set forth above with respect to independent claims 1 and 12, respectively. Lichtblau and Watkins et al. both fail to disclose each and every limitation set forth in claims 1, 6–8, 12–15, 20, 21 and 25. For at least these reasons, the Examiner has failed to establish a prima facie case for anticipation of Applicant's claims 1, 6–8, 12–15, 20, 21 and 25 under 35 U.S.C. 102(b). Withdrawal of this rejection is requested.

New Claims:

Applicant has added claims 26–35 to the pending application. The applied references fail to disclose or suggest the inventions defined by Applicant's new claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed inventions.

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[3] *See Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 USPQ 81 (CAFC 1986) ("it is axiomatic that for prior art to anticipate under 102 it has to meet every element of the claimed invention").
[4] *Id. See also Lewmar Marine, Inc. v. Barient, Inc.* 827 F.2d 744, 3 USPQ2d 1766 (CAFC 1987); *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (CAFC 1990); *C.R. Bard, Inc. v. MP Systems, Inc.*, 157 F.3d 1340, 48 USPQ2d 1225 (CAFC 1998); *Oney v. Ratliff*, 182 F.3d 893, 51 USPQ2d 1697 (CAFC 1999); *Apple Computer, Inc. v. Articulate Systems, Inc.*, 234 F.3d 14, 57 USPQ2d 1057 (CAFC 2000).

As one example, the references fail to disclose or suggest a method comprising determining a dimension M of a radio frequency identification (RFID) tag for use within a radio frequency identification (RFID) system; selecting a distance D based on the dimension M; and positioning a plurality of conductive loops of an antenna apart the selected distance D apart for communication with the RFID tag within the RFID system, as recited by independent claim 26. No new matter has been added by the new claims.

Allowable Subject Matter

In the Office Action, the Examiner objected to claims 4, 5, 8–11, 18, 19 and 22–24 as including subject matter that would be allowable if rewritten in independent form. Applicant has amended claim 22 to include elements of the base claim and intervening claims, and has amended claim 23 to depend on claim 22. Claims 22–24 are in condition for allowance. Applicant agrees with the Examiner's conclusion of allowability of claims 4, 5, 8–11, 18, and 19, but declines to amend claims 4, 5, 8–11, 18, and 19 at this time.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

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